Purpose of Today’s Discussion

• Make staff recommendation on a general East–West corridor alignment and strategy for incorporating zero-emission technology
• Describe rationale for recommendation
• Hear comments from Steering Committee
Goods Movement System
Potential East-West Freight Corridor

Assessment Summary:
Staff Recommendation

Alignment (Alt. #1):

- Avoids significant residential property impacts.
- Offers good connectivity to warehouse & manufacturing facilities.
- Results in greatest traffic reduction on parallel routes and high reductions in total & heavy truck delay.
- Provides opportunity to improve the flood control channel.
- Provides opportunity to redevelop UP-adjacent industrial property between I-710 and I-605 and to mitigate rail impacts in area.
Assessment Summary (Cont).

Connecting the SJC to SR-60:
- Full-length corridor (to I-15) is important to realize maximum benefits
- SR-60 has fewer ROW constraints east of SR-57 compared to I-10
- Near SR-57, connection to SR-60 is challenging
- Initial engineering work underway to address potential residential impacts in vicinity of SR-57/SR-60

UP- Adjacent as a Connector to I-710:
- Less residential property impacts than 91 / 105 / 605
- More engineering work would be required to lessen impacts to industrial facilities

Connection Issues

- SJC to SR-57/SR-60:
  - “S” curves: slower speed
  - Alternate direct connection: ROW impact severe
- UP-adj to SJC:
  - Potential impact on proposed park and bike path
  - Alternate has other ROW impacts
- Develop alternative design concepts
  - Evaluation of alternatives beyond 2012 RTP
Next Steps

Develop Financial Plan
Beyond 2012 RTP

- Recommendation on a refined concept for RTP
  - Initiates process of more detailed environmental and engineering study
- EIR/EIS and PSR
  - Analysis of alternatives

Benefits of a Freight Corridor to Communities/Region

- Reduce congestion for trucks and autos in corridors served
- Reduce truck traffic on general purpose lanes
- Serve corridor and regional economy
- Reduce truck/auto interactions to improve safety
- Reduce emissions and adverse health impacts
- Serve as catalyst for advanced technologies
Improving Mobility for Trucks and Autos

Truck Traffic Today (SR-60)

Doing Nothing: Rising Truck Volumes

* numbers in thousands (rounded)
Goods movement-dependent industries contribute 34% of the SCAG regional GDP – over $253 billion dollars.

Source: REMI PI+ v1.2.4 Model Data

Goods movement–dependent industries contribute 34% of the SCAG regional employment – almost 3 million jobs.
### Total Square Feet (mil) and Percent of Regional Total

<table>
<thead>
<tr>
<th>Corridor</th>
<th>Total Square Feet (mil)</th>
<th>Percent of Regional Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR-60</td>
<td>509.9</td>
<td>50%</td>
</tr>
<tr>
<td>UP Line</td>
<td>533.4</td>
<td>52%</td>
</tr>
<tr>
<td>SCE Line</td>
<td>291.5</td>
<td>29%</td>
</tr>
<tr>
<td>I-10</td>
<td>442.9</td>
<td>43%</td>
</tr>
<tr>
<td>SR-91</td>
<td>188.9</td>
<td>18%</td>
</tr>
<tr>
<td>I-605</td>
<td>106.2</td>
<td>10%</td>
</tr>
<tr>
<td>I-15</td>
<td>203.8</td>
<td>20%</td>
</tr>
<tr>
<td>I-105</td>
<td>78.4</td>
<td>8%</td>
</tr>
</tbody>
</table>

Warehouse Square Footage within 5.0 miles of different potential Freight Corridor alignments
 Provide Connectivity to Regional Manufacturing

<table>
<thead>
<tr>
<th>Corridor</th>
<th>Total Manufacturing Employment</th>
<th>Percent of Regional Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR-60</td>
<td>226,886</td>
<td>27%</td>
</tr>
<tr>
<td>UP Line</td>
<td>237,756</td>
<td>28%</td>
</tr>
<tr>
<td>I-10</td>
<td>156,046</td>
<td>18%</td>
</tr>
<tr>
<td>SR-91</td>
<td>165,976</td>
<td>20%</td>
</tr>
</tbody>
</table>

Manufacturing employment within 5.0 miles of different potential Freight Corridor alignments

- 27% of SCAG regional manufacturing employment is within 5 miles of SR-60.
Users of East West Freight Corridor

• Predominantly domestic trade and local business serving trucks
  – Warehouses & Manufacturing facilities
  – Local businesses and stores
  – Strong implications for congestion impacts on business operations

• Changes in Truck Compositions from I-710 to I-15
  – 67-78% Heavy-Duty Trucks
  – 24-57% Port Trucks (decreases further east)

Improving Safety

Doing Nothing: Truck Involved Crashes

Impacts of Accidents:
• Congestion on highways
• Increased travel time and lost productivity
• Spillover effect on parallel roads
4-Step Evaluation Process

**Step 1:** Define Initial Potential E-W Freight Corridor Alignments

**Step 2:** Screen Preliminary Alignments Against Three Initial Criteria

**Step 3:** Develop Hybrid Alignments:
- Avoid constraints / deficiencies Identified in Step 2

**Step 4:** Traffic Modeling of Leading Alternatives Against MOEs

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**Step 1: Initial Potential EWFC Alignments**
Step 2: Initial Evaluation Criteria

1. Proximity to markets: warehouses and manufacturing facilities
2. Right-of-way constraints: impacts on the adjacent properties (residential, commercial, industrial, etc.) and the level of impacts
3. Traffic impacts:
   - Regional highways with high truck volumes
   - High incident rates for truck involved crashes

Step 2: Initial Screening Outcomes

- **Proximity to Goods Movement Markets**
  - Resulted in elimination of I-210
  - Resulted in elimination of SR-91
    (Later re-added and assessed for traffic impacts)

- **ROW Constraints / Limitations (Grades, etc.)**
  - Another factor suggesting I-210 and SR-91 may not be feasible.
  - Resulted in elimination of SCE

- **Traffic Impacts**
  - Confirmed need for E-W Corridor
  - Showed importance of SR-60
  - Confirmed need to connect to I-710
Right-of-Way Assessment

Step 3: Potential Alignments – Aug. 2011

East-West Freight Corridor Potential Alignments

Legend:
- AK #1: UPRR - Adjacent to San Jose
- AK #2: UPRR - Adjacent to San Jose Creek Channel terminating at SR-27
- AK #3: SR-60 to San Jose Creek Channel to SR-60
- AK #4: SR-84 to SR-60 to San Jose
- AK #5: SR-84 Creek Channel to SR-60
- AK #6: 1-155 Creek Channel to SR-60
- AK #7: SR-84 from 1-155 to 1-158
- AK #8: UPRR - Adjacent to San Jose Creek Channel to SR-60 to 1-150

Miles
Step 4: Measures of Effectiveness (MOEs)

**Truck Volumes**

The volumes of trucks that would be carried by each of the potential alignments in 2035

**Delay (All Traffic)**

Impact on delay of all traffic within the influence area

**Delay (Truck Traffic)**

Impact on delay of all heavy-duty truck traffic within the influence area

**Impact on Parallel Routes**

Effectiveness of each alignment to reduce the truck volumes and congestion on parallel routes

### 2035 Freight Corridor Truck Volumes

<table>
<thead>
<tr>
<th>Screenline</th>
<th>Alt. #1 UP/SJC/60</th>
<th>Alt. #2 UP/SJC</th>
<th>Alt. #3 60/SJC/60</th>
<th>Alt. #4a 105/665/SJC/60</th>
<th>Alt. #4b 91/665/SJC/60</th>
<th>Alt. #5 SR-91</th>
<th>Alt. #6 UP/SJC/10</th>
</tr>
</thead>
<tbody>
<tr>
<td>SL1</td>
<td>58,700</td>
<td>58,600</td>
<td>60,700</td>
<td>57,100</td>
<td>50,700</td>
<td>78,600</td>
<td>59,900</td>
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<tr>
<td>SL2</td>
<td>58,200</td>
<td>55,400</td>
<td>57,800</td>
<td>54,700</td>
<td>55,300</td>
<td>62,300</td>
<td>57,700</td>
</tr>
<tr>
<td>SL3</td>
<td>70,300</td>
<td>N/A</td>
<td>71,100</td>
<td>70,100</td>
<td>69,300</td>
<td>55,200</td>
<td>56,500</td>
</tr>
</tbody>
</table>

*All truck lane alignments all show heavy use by trucks. Truck volumes are between 54,000 – 79,000 at all locations, all alignments.*
Reducing Truck Volumes from Regional Highways

2035 Impacts on Parallel Routes

Alt #1: UP / SJC / SR-60

East West Freight Corridor in SGV demonstrates significant reduction in the number of trucks using parallel regional highways.

2035 Impacts on Parallel Routes

<table>
<thead>
<tr>
<th>HW</th>
<th>SL #</th>
<th>Alternative Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>No-Build</td>
</tr>
<tr>
<td>I-210</td>
<td>SL1</td>
<td>44,700</td>
</tr>
<tr>
<td></td>
<td>SL2</td>
<td>40,900</td>
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<tr>
<td></td>
<td>SL3</td>
<td>27,300</td>
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<td>SR-60</td>
<td>SL1</td>
<td>42,500</td>
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<td>41,000</td>
</tr>
<tr>
<td></td>
<td>SL3</td>
<td>51,000</td>
</tr>
<tr>
<td>SR-91</td>
<td>SL1</td>
<td>29,600</td>
</tr>
<tr>
<td></td>
<td>SL2</td>
<td>36,100</td>
</tr>
<tr>
<td></td>
<td>SL3</td>
<td>37,000</td>
</tr>
</tbody>
</table>

- SR-91 has least impact on parallel routes – less regional impact
- Largest impact is on SR-60 under Alt.#1 and Alt. #3
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